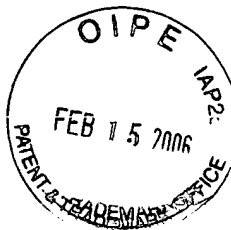


**Cotton Program**

AMS USDA SEARCH

Cotton Classing Services

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The objective of the Grading and Classing program for cotton is to facilitate interstate and foreign commerce in cotton by providing official quality determinations that aid in marketing. AMS accomplishes this goal by inspecting, identifying, and certifying that product quality is in accordance with official standards. The program determines the quality of the current crop and of the annual carryover.

Cotton classification functions are performed by the Grading Branch, consisting of classing offices, and the Standardization and Engineering Branch and the Quality Assurance Branch, which are located in Memphis, TN.

Twelve cotton classing offices make up the Grading Branch. The classing offices are located in nine states throughout the Cotton Belt. The Cotton Program Office of the Deputy Administrator is located in Washington D.C..

All office locations are shown on the map below:



Abilene TX Classing Office	Macon GA Classing Office
Birmingham AL Classing Office	Memphis TN Classing Office
Corpus Christi TX Classing Office	Phoenix AZ Classing Office
Dumas AR Classing Office	Rayville LA Classing Office
Florence SC Classing Office	Visalia CA Classing Office
Lamesa TX Classing Office	Washington Administration Office
Lubbock TX Classing Office	

Direct supervision of all cotton grading and classing services performed by classing offices is provided by the Grading Branch. The Standardization and Engineering Branch and the Quality Assurance Branch provide oversight and guidance to the grading services. Standardization and Engineering is responsible for development, preparation, and distribution of the official standards used to ensure uniformity in grading. Quality Assurance administers a comprehensive review and evaluation of quality assurance activities to analyze internal office operations and assigned classification data. Quality Assurance also has final authority in resolving any questions concerning assigned grades. These three branches work cooperatively to ensure that all grading services are provided correctly and in adherence will all applicable policies and procedures.

Agricultural Marketing Specialists assigned to the classing offices make at least two inspections of all sampling agents during the year to determine if samples are being properly drawn. Samples must be properly drawn and handled to maintain representativeness of the sample. The usefulness of a sample also depends upon the preservation of its identity. Halves of the sample are drawn from each side of the bale, and a tag or coupon showing bale number, name of gin, compress, warehouse, or other distinct identification must be kept between the two portions if the sample's identity is to be maintained.

Cotton Classification

Classification of samples is based on official standards. Leaf grade, preparation, and extraneous matter determinations are made by cotton classers. All other fiber properties of both Upland and American Pima cotton are determined by High Volume Instrument (HVI) systems. The HVI systems currently

consist of instrument measurements for fiber length, length uniformity, strength, micronaire, color, and trash.

Fiber property measurements made by HVI and grades assigned by classers for each sample are stored automatically in the computer as soon as the classification is completed. The classification data is then available by telecommunications to the authorized recipient's computer. The classification data may also be delivered to the grower or his designated agent by means of tapes or diskettes. An explanation of how to interpret classification data can be found in [Cotton Classification Results: Understanding the Data](#)

Fiber Measurements

A description of each measurement included in USDA's official cotton grade follows:

Leaf Grade - Highly trained human classers determine the leaf grade by comparison with the practical forms of the Universal standards for the grades.

Fiber Length - Fiber length is measured on a beard of cotton fibers on HVI systems and is reported in hundredths of an inch and equivalent staple length in thirty-seconds of an inch. Length is a good indicator of yarn strength and spinning efficiency.

Length Uniformity - Length uniformity measures the degree of fiber length uniformity in a sample. Fiber length uniformity is related to spinning efficiency, yarn uniformity, and yarn strength.

Strength - The fiber strength measurement is made by clamping and breaking the beard of fibers with 1/8-inch gage spacing between the clamp jaws. The strength reported is the force in grams required to break a bundle of fibers one tex unit in size.. A tex unit is equal to the weight in grams of 1,000 meters of fiber. Fiber strength is closely related to yarn and fabric strength and to spinning efficiency.

Micronaire - The airflow instrument in the HVI system measures fiber fineness. Fineness and maturity are highly correlated within the same cotton variety. Fiber fineness affects yarn appearance, yarn uniformity, and yarn strength.

Trash - The trash measurement is made by a video trashmeter, which measures the percentage area of trash on the sample surface. This measurement provides an estimate of the total amount of trash in the bale.

Color - Color measurements are made by a colorimeter. The instrument measures grayness (Rd), which indicates how light or dark the sample is, and also yellowness (+b), which indicates how much yellow color is in the sample. Color gives an indication of the fibers' ability to accept dyes in the manufacturing process.

Classing Services

- [Classification](#)
- [Review Classification](#)
- [National Database](#)
- [Form R Memorandum](#)
- [Form A Memorandum](#)
- [Form D Memorandum](#)
- [Reclassification-CCC Sales](#)
- [Futures Classing](#)

The following grading and classing services are provided on a fee basis:

Smith-Doxey Classification - Classification data showing color grade, leaf grade, length, length uniformity, strength, micronaire, trash, and color for each bale is furnished to the producer. Producers use this information in selling their cotton or placing it in the Commodity Credit Corporation (CCC) loan program. Purchases of cotton from farmers are made on the basis of this classification, which is referred to in the cotton trade as the Smith-Doxey Class.

All fee classing services provide for one **review** classification. The applicant may request that the review be done by the local classing office or by the Quality Assurance Branch in Memphis, TN.

A **National Database** is maintained at the Cotton Program offices in Memphis, TN, for telecommunication of classing data to owners/agents other than cotton gins, such as merchants, textile mills, and marketing organizations. The system contains classing data for the current and previous crop years. This system is also capable of issuing printed Form R Memoranda to firms requesting this service. To receive data from this system, callers must have a stand-alone IBM-compatible personal computer, a Hayes-compatible modem, and the Cotton Program's software package. The current cost for telecommunicated data from the National Database is five cents per bale. Long distance telephone charges are paid by the caller. There is a one-time charge of \$17.25 for the user software. **Questions regarding the National Database should be addressed to the Cotton Program's IT Staff in Memphis, TN, at 901/384-3007. The fax number is 901/384-3035.**

Form R Memorandum - The owner of the cotton may request a certified listing of bale by bale classification data. The charge for this service is fifteen cents per record.

Form A Memorandum - This certificate is issued on samples drawn and submitted to a classing office by a licensed warehouseman at the request of the cotton owner. A shipper is sometimes required to obtain this certificate for Government-financed exports under Public Law 480 programs and AID programs to countries that do not have cotton buyers experienced in the classification of U.S. cotton.

Form D Memorandum - This certificate is issued on samples submitted by the owner of the cotton for an informative classification. Upland-type cotton grown in foreign countries is classed under this authority. Since AMS does not license or inspect the samplers of the cotton submitted for classification, this classification cannot be certified.

Miscellaneous Classing - Cotton classing offices also class cotton for USDA research agencies, State Experiment Stations, and others as authorized under the U.S. Cotton Standards Act.

Reclassification of Cotton for CCC Sales Program - Most CCC sales programs in recent years have required reclassification of the cotton, on a fee basis, for final settlement purposes. Although the volume of CCC program classing has been small in recent years, substantial volumes have been classed in previous years, and the variation in volume from year to year is caused by market conditions. The fee for this service is paid by the cotton buyer.

Futures Classing - All cotton eligible for delivery on futures contracts must be classed by AMS. This classing is done on a fee basis at the Quality Assurance Branch in Memphis, TN.

The licensing of cottonseed samplers and the maintenance of official cottonseed standards has been discontinued by the AMS, Cotton Program.

AMS program costs are fully recovered each year from the fees collected plus the proceeds of the sales of rebaled loose cotton. The samples for Smith-Doxey classification become Government property

after classification. Samples for classification under other programs also become Government property after classing, unless return of the sample is requested and a fee is paid for the sample return. The samples are rebaled after classing and sold on competitive bids.

About 98 percent of all cotton produced each year is graded on a fee basis for cotton producers. This is indicative of the grower's need for quality information in the marketing of cotton. USDA's official standards for cotton are recognized worldwide and enhance the marketing system for the entire cotton industry, from producer to processor, and ultimately to the consumer.

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